



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,200	01/17/2002	Stephen T. Garelli	MAC - 206	7246
8131	7590	07/26/2005		
MCKELLAR IP LAW, PLLC 784 SOUTH POSEYVILLE ROAD MIDLAND, MI 48640			EXAMINER LUK, EMMANUEL S	
			ART UNIT	PAPER NUMBER

1722

DATE MAILED: 07/26/2005 .

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/051,200

Applicant(s)

GARELLI, STEPHEN T.

Examiner

Emmanuel S. Luk

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cole (4541795) in view of Alieri (5786079).

(A) an upper mold segment (103);

(B) a lower mold segment (107), and

(C ) a moveable core (109) having a top surface, a bottom surface and a centered opening therethrough, said opening having a near end and a distal end; wherein each mold segment has a confronting flat surface, each mold segment being capable of mating with the other mold segment at their respective confronting flat surfaces;

the opening in the concavity of the lower mold segment running through the lower mold segment and exiting through the bottom surface of the lower mold segment (Fig. 3);

the moveable core having an outside configuration essentially identical to the concavities when the mold segments are mated with each other, the core having internally attached to the bottom thereof, a stem, said stem being slidably mounted in the opening in the concavity of the lower mold segment and extending beyond the bottom surface of the lower mold segment, said stem having centered therethrough, an opening (see Figure 3);

the centered opening in the core having an air valve located in and near the near end thereof said centered opening in the core and said centered opening in the stem being interconnected to allow the intermittent passage of gas therethrough, there being a space created between the outside configuration of the core and the concavities when the mold segments are mated (Col. 8, lines 3-14);

(II) providing a clamping force on the mold (Fig. 3 and 5);

(III) injecting liquid moldable material and allowing the liquid moldable material to fill the space created between the outside configuration of the core and the concavities (injection flow via passage 133 to the cavity 10);

(IV) allowing the liquid moldable material to become a solid molded product (Col. 8, lines 60-62);

(V) removing the clamping force on the mold and separating the upper mold segment and the lower mold segment and thereafter (Col. 8, lines 62-66); moving the core from the lower mold segment (Col. 9, lines 3-6);

(VI) thereafter, injecting gas into the centered opening in the stem, thereby opening the gas valve in the near end of the centered opening in the core, and allowing the solid molded product to be inflated by the injected gas until the solid molded product is released from the core and thereafter, removing the solid molded product from the mold (Col. 9, lines 29-62). In regards to the concavity, portions of the lower mold segment is concaved (Fig. 6) and the upper mold segment is concaved (Fig. 5). There are concave surfaces and flat segments on the core mold (Fig. 4).

Cole fails to disclose the material being inflated by the gas.

Alieri teaches a cap made between a mold (59) and core (3) where compressed air feeds to the cap to partially space 'the thread C from the portion (9), reducing the resistance of the cap to expulsion during the subsequent descent of the ring (46)' (Col. 6, lines 57-60).

Cole does teach the structure that is claimed and also the method of molding. Cole states that the injection of air will aid in the ejection. Depending on the material that is molded, the injection of air might inflate the product on a smaller scale as it is ejected from the core thus Cole is capable of inflating the product. Alieri teaches that the inflation of the product to aid in ejection of the product is known in the art. Cole and Alieri are analogous art as both pertain to injection molding and the use of compressed gas/air for aid in ejection of the product. Thus, it would have been obvious to one of

Art Unit: 1722

ordinary skill in the art to modify Cole with the air being used to inflate the product as taught by Alieri because it aids in reducing the resistance the product may encounter during ejection.

### ***Response to Arguments***

4. Applicant's arguments filed 5/19/05 have been fully considered but they are not persuasive. The applicant's arguments have been noted. However, the rejection combination of Cole in view of Alieri fully addresses the matter concerning the injection molding of the product and the subsequent steps in cooling and then ejecting the product, including inflation of the product.

### ***Conclusion***


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Thursday 8 to 5 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Davis can be reached on (571) 272-1129. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL



ROBERT DAVIS  
PRIMARY EXAMINER  
GROUP ~~1300~~ 1700

7/25/08